

What is claimed:

1. A method for producing mineral wool nonwoven fabric (52) comprising the steps:

fiberizing the raw material in at least one fiberizing means (26a, 26b);

depositing the fibers on a collection conveyor (16) of a shroud (10) for forming a primary nonwoven (24);

slitting said primary nonwoven in longitudinal direction so that a first blanket section (38) and a second blanket section (40) materialize;

transporting said first blanket section (38) and said second blanket section (40) such that the conveying distances between shroud and curing oven are longitudinally staggered;

inverting said first blanket section (38) so that the underside of said first blanket section (38) is located upwards; and

depositing said first blanket section (38) on said second blanket section (40) to form a secondary nonwoven (52).

2. A method according to claim 1, wherein slitting said primary nonwoven in longitudinal direction is executed with a water cutting jet.

3. A mineral wool blanket or mineral wool mat of cross-linked mineral wool fibers including a density distribution across the thickness (z);

the upper portion (24b) and the lower portion (24b) of said mineral wool blanket or mineral wool mat each exhibiting a density higher than that of the portion (56) located between said upper portion and said lower portion; and fiberizing the raw material in at least one fiberizing mean (26, 26b);

each of said upper portion and lower portion of said mineral wool blanket or mineral wool mat being deposited in a collection conveyor (16) of a shroud (10) for forming a primary nonwoven (24); and including

two layers exhibiting identical properties as regards the fiber quality and/or the binder content and the layers exhibiting identical density gradients,

wherein the density distribution across the thickness (z) of the blanket or the mat comprise in the portion (56) located between said upper portion and said lower portion a value of constant density and that the said density distribution increases in the upper and lower portion (24b) like a mirror-image.

4. Mineral wool blanket or mat according to claim 3, wherein the density distribution in the portion (56) located between said upper portion and said lower portion exhibits a minimum value and exhibits a maximum value in the border portion of the upper and the lower portion (24b).

5. Mineral wool blanket or mat according to claim 3, wherein the mineral wool blanket or mineral wool mat has a density in the range of 4 to 70 kg/m<sup>3</sup>.

6. Mineral wool blanket or mat according to claim 3, wherein the thickness of said mineral wool blanket or mineral wool mat is in the range of 50 to 500 mm.

7. Mineral wool blanket or mat according to claim 3, wherein said upper portion (24b) and said lower portion (24b) of said mineral wool blanket or mineral wool mat comprises in each case a higher binder content.

8. Mineral wool blanket or mat according to claim 3, wherein the binder content in said upper portion and said lower portion is roughly 1% to 4% above the average binder content.

9. Mineral wool blanket or mat of cross-linked mineral wool fibers including a density distribution across the thickness (z) according to claim 3, wherein the average density is in the range 4 to 11 kg/m<sup>3</sup>, whereby said blanket or mat comprises homogenous mass distributions transversely.

10. Mineral wool blanket or mat according to claim 5, wherein the density is 4 to 25 kg/m<sup>3</sup>.

11. Mineral wool blanket or mat according to claim 6, wherein the thickness is in the range of 120 to 360 mm.

12. Mineral wool blanket or mat according to claim 8, wherein the binder content is 1% to 2% above the average binder content.

13. Mineral wool blanket or mat according to claim 9, wherein the average density is 4 to 9 kg/m<sup>3</sup>.

14. Mineral wool blanket or mat according to claim 10, wherein the average density is 4 to 6 kg/m<sup>3</sup>.